APRIL/MAY 2024

23UIM11 — PROGRAMMING IN C

Time: Three hours

Maximum: 75 marks



SECTION A — $(10 \times 2 = 20 \text{ marks})$

Answer ALL questions.

- 1. What is a variable? Give examples.
- 2. What are the different tokens available in C?
- 3. What are unary operators? Give example.
- 4. Write the syntax of continue statement.
- 5. Define a character array with syntax.
- 6. How do you initialize a 2-D array? Give an example.
- 7. Write any two differences between user defined and library functions.
- 8. Outline a structure with syntax.
- 9. What is chain of Pointers?
- 10. What is fseek()?

SECTION B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions.

11. (a) Explain with example, the various constants available in C.

Or

- (b) Write the guidelines to use scanf() and printf() functions in C language.
- 12. (a) Write short notes on switch statement with an example.

Or

- (b) Explain with example the different string manipulation library functions.
- 13. (a) Write a program using function to check whether the given number is prime or not.

Or

- (b) Explain the concept of recursion with an example.
- 14. (a) Give five differences between structure and Union.

Or

(b) Write a C program to print name, subject and marks of students using structure.

15. (a) Write about pointer and arrays.

Or

(b) Define pointer. How to declare and initialize it?



SECTION C — $(3 \times 10 = 30 \text{ marks})$

Answer any THREE questions.

- 16. Explain any five operators used in C language.
- 17. Explain if, if else, and cascaded if-else with examples.
- Differentiate between call by value and call by reference with examples.
- 19. Explain how structures within structures are used? Give example.
- 20. What is pointer? Give the advantages and disadvantages of pointer data type.